

SUB E3
D1
member selected from the group consisting of starch derivatives having a basic repeating unit structure of $C_6H_{10}O_5$; viscous polysaccharides having a basic repeating unit structure of $C_6H_{10}O_5$; water-soluble cellulose derivatives having a basic repeating unit structure $C_6H_{10}O_5$, and water-soluble synthetic resins.

D2
SUB E4
12. (Twice Amended) The graphite material for the negative electrode according to claim 1, wherein said graphite material is coated with water-soluble synthetic resins selected from the group consisting of water-soluble acrylic resin, water-soluble epoxy resin, water-soluble polyester resin, and water-soluble polyamide resin.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

REMARKS

This is a Request for Continued Examination. The claims in this application remaining under examination are 1-3 and 7-14.

The rejection of claims 1-3 and 7-14 under 35 U.S.C. § 102(e) is again respectfully traversed. The Liu et al. reference does not anticipate these claims as now amended for the reasons given below. Applicants do not dispute that Liu et al. teaches in Column 5, that graphite acts as an electrode in a lithium

cell. However, the surface of the graphite core of Liu et al. is coated with a carbon precursor resin, which is subjected to heat treatment and forms a layer of non-graphitizable carbon material. In other words, the Liu et al. graphite material has two layers, both a layer consisting of graphite and a layer, which is non-graphitizable carbon. In the present application, Claim 1 is amended to have only a layer of surface active material that is free from graphitizing by heat treatment and consisting essentially of certain starch derivatives as defined in Claim 1.

In this Preliminary Amendment, Claims 1 and 12 have been amended to meet the other objections of the Examiner. In Claim 1, the expression "not carbonized" has been omitted, and in Claim 12, the proper Markush expression "groups consisting of" is now used.

It is earnestly believed that the amendments proposed in this response patentably distinguish over the art cited by the Examiner and therefore render the claims allowable. Entry of the amendment is respectfully solicited. In view of the foregoing argument and amendments, favorable action and allowance of the present application is respectfully urged.

The Examiner is invited to contact Applicants' representative by telephoning Edward H. Valance, Reg. No. 19,896, at (703) 205-8000 in the Washington Metropolitan area to further the prosecution and clarify any issues which remain unsolved preventing allowance of this application.

Application Number: 09/254,316

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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JAK/EHV:bmp

Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKING TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

Claim 1.(Thrice Amended) In a graphite material for the negative electrode of a lithium ion secondary cell which material is capable of occluding or releasing lithium ions, the improvement wherein said graphite material absorbs or is coated with a [single] layer of surface active material [not carbonized] that is free from graphitizing by heat treatment and consisting essentially of at least one member selected from the group consisting of starch derivatives having a basic repeating unit structure of $C_6H_{10}O_5$; viscous polysaccharides having a basic repeating unit structure of $C_6H_{10}O_5$; water-soluble cellulose derivatives having a basic repeating unit structure $C_6H_{10}O_5$, and water-soluble synthetic resins.

Claim 12.(Twice Amended) The graphite material for the negative electrode according to claim 1, wherein said graphite material is coated with water-soluble synthetic resins selected from the group [comprising] consisting of water-soluble acrylic resin, water-soluble epoxy resin, water-soluble polyester resin, and water-soluble polyamide resin.